AMENDMENTS TO THE DRAWINGS

Attached hereto is(are) twenty (20) sheet(s) of Corrected Formal Drawings that comply with the provisions of 37 C.F.R. § 1.84. The Corrected Formal Drawings incorporate the following drawing changes as noted in the PTO-948 Form, paper number 18.

It is respectfully requested that the Corrected Formal Drawings be approved and made a part of the record of the above-identified application.

REMARKS

Applicants' representative would like to Examiner Hayes for his time with the various telephone discussions regarding the present application and suggested claim amendments. Claims 1-39, 53, 57, 64-67 and 70 have been cancelled. Claims 40-45, 47-52 and 54-55 are allowed. Claims 46, 56, 58-63 and 68-69 are amended herein. The amendments to claims 46, 56, 58-63 and 68-69 are largely made per the suggestions of the Examiner or to otherwise overcome issues raised in the Office Action. No new issues are raised for consideration by these amendments; as such entry and consideration thereof are respectfully requested.

Objections to the claims

Claim 61 has been objected to for depending on a rejected base claim. Per the suggestion of the Examiner, claim 61 has been amended to be in independent form. Withdrawal of the objection is therefore respectfully requested.

Rejections under 35 U.S.C.§112, 1st paragraph (written description)

Claims 21, 23, 30-34, 46, 53, 57, 64-67 and 70 have been rejected under 35 U.S.C.\$112, $1^{\rm st}$ paragraph for lack of written

description. Claims 21, 23, 30-34, 53, 57, 64-67 and 70 have been cancelled, thus rendering this rejection moot.

Claim 46 has been specifically rejected with the assertion that the specification only describes the use of specific pairs of primers. Claim 46 has been amended per the suggestion of the Examiner to recite, "using the primer pairs consisting of SEQ ID NOS: 5 and 6 or SEQ ID NOS: 7 and 8, respectively". Withdrawal of the rejection as to claim 46 is therefore respectfully requested.

Rejections under 35 U.S.C. §112, 1st paragraph (enablement)

Claims 21, 23, 30-32, 46, 53, 57-60, 62-65 and 66-70 have been rejected under 35 U.S.C. §112, 1st paragraph for lack of enablement. Claims 21, 23, 30-32, 53, 57, 64-67 and 70 have been cancelled, thus rendering the rejection moot with regard to these claims. The rejection as directed to pending claims 46, 58-60, 62-63 and 68-69 is addressed herein.

Claims 58-60 have been amended per the suggestion of the Examiner to recite, "T-BCD541 gene consisting of SEQ ID NO:22..."

Claim 62 has been similarly amended per the suggestion of the Examiner to recite, "by [direct] nucleotide sequencing."

The Examiner suggests that claim 69 be amended to recite, "the Survival Motor Neuron gene which consists of SEQ ID NO:22." However, claim 69 does not contain the indicated language, which the Examiner discussed in the Office Action. Claim 69 has been amended to recite, "wherein exon 7 comprises consists of nucleotides 340 to 401 of SEQ ID NO: 13, and exon 8 comprises consists of nucleotides 846 to 1408 of SEQ NO: 13." Applicants believe that this amendment addresses and overcomes the issue raised by the Examiner.

In addition, claim 68 has been amended to delete the use of "a complement of SEQ ID NO: 12 or 13" as a probe for detecting SMA in an individual.

As it is believed that the above amendments address and overcome the rejections of the Examiner. Withdrawal of the rejections is respectfully requested.

Rejections under 35 U.S.C. §112, 2nd paragraph

Claims 30, 32, 56 and 63 have been rejected under 35 U.S.C.\$112, 2^{nd} paragraph as being unclear. Claims 23, 30 and 32

have been cancelled, thus rendering the rejections of these claims moot. The rejections of claims 53, 56 and 63 are addressed herein.

Claims 56 and 63 have been rejected for being indefinite in the recitation of "step (c)", with the assertion that there is no antecedent basis for this feature in claim 30. Claims 56 and 63 have been amended to provide proper antecedent basis for all of the recited steps.

Rejections under 35 U.S.C.§102(b)

Claims 53 and 23 have been rejected under 35 U.S.C.§102(b) as being anticipated by the Stratagene catalogue. Claims 23 and 53 have been cancelled, thus obviating this rejection.

Applicants believe the above amendments and remarks address the issues discussed during the interview. If the Examiner has any questions or would like to discuss the application further he is invited to please contact MaryAnne Armstrong, PhD (Reg. No. 40,069) at (703) 205-8000.

Applicants request a one (1) month extension of time for filing the present response. The required fee is attached hereto.

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If necessary, the Commissioner is hereby authorized, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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